IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

ALLERGAN, INC.,	§	
	§	
v.	§	CIVIL ACTION NO. 2:09-cv-97
	§	
SANDOZ INC.,	§	
ALLERGAN, INC.,	§	
	§	
v.	§	CIVIL ACTION NO. 2:09-cv-182
	§	
HI-TECH PHARMACAL CO., INC**.,**	§	
ALLERGAN, INC.,	§	
	§	
v.	§	CIVIL ACTION NO. 2:09-cv-348
	§	
ALCON LABORATORIES, INC., et al.,	§	
ALLERGAN, INC.,	§	
	§	
v.	§	CIVIL ACTION NO. 2:10-cv-200
	§	
APOTEX INC. and APOTEX CORP.	§	

MEMORANDUM OPINION AND ORDER

I. INTRODUCTION

Plaintiff Allergan, Inc. ("Allergan") owns approved New Drug Application ("NDA") No. 21-398 for Combigan® (brimonidine tartrate/timolol maleate ophthalmic solution) 0.2%/0.5%. Combigan® was approved by the Food and Drug Administration ("FDA") for the treatment of glaucoma and ocular hypertension in October of 2007. U.S. Patent Nos. 7,030,149 ("the '149 patent"), 7,323,463 ("the '463 patent"), 7,320,976 ("the '976 patent"), and 7,642,258 ("the '258 patent") (collectively, the "patents-in-suit") are listed in the FDA-Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the "Orange Book," as covering

Combigan® and/or methods of using Combigan®.

Allergan has filed multiple actions alleging that multiple defendants infringe the patents-in-suit. These actions include *Allergan, Inc. v. Sandoz Inc*, Civil Action 2:09-cv-97 (filed April 7, 2009); *Allergan, Inc. v. Hi-Tech Pharmacal Co., Inc.*, Civil Action 2:09-cv-182 (filed June 5, 2009); *Allergan, Inc. v. Alcon Laboratories, Inc. et al.*, Civil Action 2:09-cv-348 (filed November 6, 2009); and *Allergan, Inc. v. Apotex, Inc. et al.*, Civil Action 2:10-cv-200 (filed June 15, 2010). Each of the defendants in these actions has filed Abbreviated New Drug Applications ("ANDAs") with the FDA seeking approval to manufacture and sell generic versions of Combigan®. The Court consolidates all of these actions for pretrial and trial purposes. On January 28, 2011, the Court held a claim construction hearing where the parties presented oral arguments regarding the disputed terms. This order will first briefly address the technology at issue in the case and then turn to the merits of the claim construction issues.

II. BACKGROUND OF THE TECHNOLOGY

Glaucoma is a blinding disease of the eye that afflicts 70 million people worldwide. While incurable, it can be managed by medication that slows the progression of the disease. The invention of the patents-in-suit relates to combining two glaucoma drugs—timolol and brimonidine tartrate—into a single composition. In the patents-in-suit, the patentee claimed the fixed combination products, along with methods of using them. Specifically, the '149 patent has four claims to methods of treating glaucoma or ocular hypertension with a 0.2% brimonidine tartrate/0.5% timolol formulation administered twice a day, where the treatment is as effective as treatment with brimonidine three times a day and timolol twice a day. The '976 patent has one claim to a method of treating glaucoma or ocular hypertension with a therapeutically effective

amount of a formulation containing 0.2% brimonidine tartrate and 0.5% timolol. The '463 patent has six claims to compositions containing 0.2% brimonidine tartrate and 0.5% timolol and articles of manufacture containing these compositions along with packaging material indicating use twice a day for glaucoma treatment. The '258 patent also has nine claims to certain compositions containing 0.2% brimonidine tartrate and 0.5% timolol and articles of manufacture that include those compositions. The '149, '463, and '258 patents also contain claims directed to the reduction of Benzalkonium Chloride ("BAK"). BAK is the most widely used ophthalmic preservative and is known to be toxic to a patient's eye. The '149, '976, and '463 patents share a common specification, and the '258 patent is a continuation-in-part of the '149 patent. Allergan has asserted every claim of the patents-in-suit against the defendants.

The patents-in-suit share the same abstract that states:

> Disclosed are pharmaceutical compositions comprising brimondine and timolol for topical ophthalmic delivery and a method of treatment comprising administering said composition when indicated for glaucoma and associated conditions such as elevated intraocular pressure in the eyes of humans.

As an exemplary claim of the patents-in-suit, Claim 1 of the '149 patent is reproduced below:

> 1. A method of treating glaucoma or ocular hypertension by topical administration of about 0.2% brimonidine by weight to an eye of a person in need thereof, said improvement comprising topically administering to said eye, in a single composition, about 0.2% brimonidine by weight and about 0.5% timolol by weight twice a day; as the sole active agents; wherein said method is as effective as administration of 0.5% timolol twice a day and 0.2% brimonidine three times a day to said eye, wherein the two compounds are administered in separate compositions.

One of the purported benefits of combining these two glaucoma medications into a single

composition is that it only needs to be administered two or three times a day versus five times a day when they are administered serially. *See, e.g.,* '149 Patent, 2:47-67. This helps to ensure patient compliance by avoiding a regimen that requires five or more separate doses a day. *See, e.g.,* '149 patent, 1:10:17. The specifications of the patents-in-suit also disclose that the single combination reduces the amount of the BAK preservative that the patient is exposed when compared to administering each drug serially. *See, e.g.,* '149 Patent, 2:47-67. As discussed, this is important because at high concentrations the BAK preservative is toxic to the eye. *Id.*

III. GENERAL PRINCIPLES GOVERNING CLAIM CONSTRUCTION

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, the Court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id*. For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id*. "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of

the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp*., 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the *claims* of a patent define the invention to which the patentee is entitled the right to exclude." 415 F.3d at 1312 (emphasis added) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id*. The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id*. at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to and intended to be read by others skilled in the particular art. *Id*.

The primacy of claim terms notwithstanding, *Phillips* made clear that "the person of

ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id*. Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id*. at 1315, *quoting Markman*, 52 F.3d at 978. Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id*. at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

> Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Id.* at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id*. Nevertheless, the

prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319-24. The approach suggested by *Texas Digital*—the assignment of a limited role to the specification—was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id*. at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id*. at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id*. The definitions found in dictionaries, however, often flow from the editors' objective of assembling all of the possible definitions for a word. *Id*. at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The

court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id*. at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant. Having read the parties' papers and carefully considered their arguments and the relevant legal authority, the Court hereby rules as follows.

IV. AGREED CONSTRUCTIONS

Based upon the joint submission of claim construction charts and subsequent arguments in briefing and at the hearing, the following terms of the patent have been agreed to by the parties.

1. "Brimonidine"

Claim language	Agreed Construction
"Brimonidine"	"Brimonidine tartrate"

The Court finds that the parties agreed construction is consistent with the intrinsic evidence. First, the specification of the '149 patent discloses that the "chemical name for *brimonidine* is 5-Bromo-6-(2-imidazolidinylideneamino)quinoxaline L-*tartrate*." '149 patent, 1:50-53 (emphasis added). Thus, the '149 specification identifies its use of the term "brimonidine" as including the salt form and not the neutral form. Second, the specification of the '258 patent also distinguishes "brimonidine" from "brimonidine free base," which is the neutral form of brimonidine having the chemical name 5-Bromo-6-(2-imidazolidinylideneamino) quinoxaline. '258 patent, 1:64-67. Once again, the term "brimonidine" is associated with its salt form and not its neutral form. Finally, the '149 specification also list "Brimonidine Tartrate" in

the formulation table for the Brimonidine-Timolol combination. '149 patent, 3:43-67. Likewise, the '149 specification uses "brimonidine" as shorthand for a "brimonidine tartrate ophthalmic solution." '149 patent, 4:13-15. Thus, the parties agreed construction is consistent with the intrinsic evidence and is adopted by the Court.

2. "Timolol"

Claim language	Agreed Construction
"Timolol"	"Timolol free base"

Apotex was the only party that originally disputed the construction of this term, but only as the term is used in the '258 patent. That is, all of the parties agreed to the proposed construction of the term "timolol" as it is used in the '149, '976, and '463 patents. With respect to the '258 patent, Apotex originally proposed a construction that included the additional limitation of "timolol maleate." At the claim construction hearing, however, Apotex's counsel stated that "Apotex has disagreed with Allergan and the co-defendants with respect to whether the term should be construed to be timolol free base -- or timolol free base or timolol maleate. Apotex believes that our position is correct, however, we are going to be satisfied with the Court's decision either way. So we're not going to be arguing in support of that term today, as well." Transcript of Claim Construction Hearing at 4:19-5:1. Thus, it appears that the parties' agreed construction applies to all of the patents-in-suit. To the extent that Apotex maintains that a special construction is required only for the '258 patent, the Court rejects this argument and finds that the parties' proposed construction is consistent with the intrinsic evidence for all of the patents-in-suit and adopts it as the proper construction.

Regarding the '258 patent, timolol maleate is a salt form of timolol that is formed when the maleate salt is combined with the free base form of timolol. The specification of the '258 patent discloses that "[t]imolol free base is the neutral form of timolol" and "[b]rimonidine free base is the neutral form of brimonidine, i.e. 5-Bromo-6-(2-imidazolidinylideneamino) quinoxaline." '258 patent, 1:65-2:40. Additionally, the specification states that "[c]ompositions having a combination of timolol free base and brimonidine tartrate are more stable than the combination of timolol maleate and brimonidine tartrate. Compositions having a combination of timolol free base and brimonidine free base may have additional stability." '258 patent, 3:58-62. The specification further discloses a composition "prepared as described in Example I, except 0.5% timolol free base is used instead of timolol maleate. The composition is effective as described in Example I, but is more stable." '258 patent, 9:44-47. Thus, the specification discusses both forms of timolol. The salt form, timolol maleate, and the neutral form, timolol free base. With this in mind, the Court turns to the claim language itself.

Claim 1 of the '258 patent recites a "composition comprising 0.2% brimonidine (w/v) and 0.5% timolol (w/v), in a single composition." Claim 4 further specifies that "[t]he composition of claim 1 wherein … timolol is timolol maleate." Apotex originally contended that this claim language requires that the term "timolol" be construed to include both timolol maleate and timolol free base because a dependent claim must narrow the claim from which it depends. In other words, Apotex argued that if timolol, as used in claim 1, is limited to only the free base form (*i.e.* no salt form) then the term "timolol" could not also include the maleate form as claimed in dependent claim 4. The Court disagrees and rejects Apotex's proposed construction because it is not consistent with the usage of the term in specification and would exclude a

preferred embodiment.

Specifically, the '258 specification discloses a first preferred embodiment of the claimed Brimonidine-Timolol combination having 0.68% (w/v) of Timolol Maleate. '258 patent, 4:27-44, "Table." The specification further states that 0.68% of Timolol Maleate is "[e]quivalent to 0.5% (w/v) Timolol, free base." *Id.* The specification also disclose a second preferred embodiment that is more stable than the first preferred embodiment because 0.5% timolol free base is used instead of timolol maleate. '258 patent, 9:44-47. Thus, for these disclosed embodiments to be included within the "0.5% timolol (w/v)" requirement of claim 1, the timolol has to be 0.5% timolol free base because 0.5% timolol maleate would result in less than the 0.5% timolol free base, thereby excluding the disclosed preferred embodiment. *See, e.g., Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996) (noting that a claim construction that excludes a preferred embodiment is rarely, if ever, correct). Thus, it would be incorrect to rewrite claim 1 so that it requires a "composition comprising 0.2% brimonidine (w/v) and 0.5% timolol [maleate] (w/v), in a single composition," because the claimed composition would include less than the 0.5% timolol free base disclosed in these embodiments. In contrast, if the term is construed as 0.5% "timolol free base" then claim 1 includes the preferred embodiment and is consistent with the specification.

Additionally, construing the term "timolol" as "timolol free base" is further limited by claim 4 because it requires the salt form of timolol in a percentage that is equivalent to the 0.5% timolol free base limitation of claim 1. In contrast, if the Court were to adopt the construction originally proposed by Apotex, then the term "timolol" as used in claim 4 would not provide a further limitation to claim 1 because it would incorrectly include both the free base and salt

forms of timolol. Finally, the Court is of the opinion that the "timolol" term should be construed consistently across the patents-in-suit given the similarity in the claims and the specifications. *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) ("A claim term should be construed consistently with its appearance in other places in the same claim or in other claims of the same patent"). Given this, the Court finds that one of ordinary skill in the art would understand that the term "timolol" as it is used throughout the claims refers to "timolol free base." Therefore, to the extent that Apotex argues that this term requires a unique construction for the '258 patent, the Court rejects this argument and adopts the parties' agreed construction for all of the patents-in-suit.

3. "Single composition"

Claim language	Agreed Construction
"Single composition"	Plain and ordinary meaning

The Court finds that the parties agreed construction is consistent with the intrinsic evidence. Although, the exact phrase "single composition" only appears in the claims, the specification is clear that the invention relates to combining the brimonidine and timolol medications into a single composition to overcome the problems associated with administering these medications separately. *See, e.g.*, '149 patent, 1:1-28. The surrounding claim language also makes clear that these two medications are combined into a single composition versus administering these two compounds in "separate compositions." *See, e.g.*, '149 patent, claim 1. Therefore the Court agrees that this phrase should not be confusing to a jury and does not require construction. *Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1367 (Fed. Cir. 2004) ("[W]hen

the parties do not dispute the claim language, but just tell the jury to use the 'plain meaning,' the district court is not required to add an additional layer of complexity by 'constructing' the words of the claim merely to reiterate those words in a jury instruction.")

4. "sole active agents"

Claim language	Agreed Construction
"sole active agents"	Plain and ordinary meaning

The phrase "sole active agents" was originally a disputed phrase. The parties now agree that the phrase does not need to be construed because Allergan concedes that brimonidine and timolol are the "sole active agents" of the claimed invention, and that each is "active" because it lowers intraocular pressure (IOP). A review of the intrinsic evidence confirms that Allergan's concession is consistent with how the phrase is used in the claims and the specification. Therefore, the Court finds that the parties agreed meaning is consistent with the intrinsic evidence and the phrase does not need to be construed by the Court.

V. TERMS IN DISPUTE OF THE PATENTS-IN-SUIT

1. "treating glaucoma or ocular hypertension"; "treatment of glaucoma or ocular hypertension"; "useful for treating glaucoma or ocular hypertension";"useful for treating glaucoma"; "useful for treating ocular hypertension"

Claim Phrase	Allergan's Proposed Construction	Sandoz/Hi-Tech/Alcon/Apotex Proposed Construction
treating glaucoma or ocular hypertension	treating glaucoma or ocular hypertension with a drug that meets FDA standards for approval	treating glaucoma or ocular hypertension
treatment of glaucoma or ocular hypertension	treatment of glaucoma or ocular hypertension with a drug that meets FDA standards for approval	treatment of glaucoma or ocular hypertension
useful for treating glaucoma or ocular hypertension	useful for treating glaucoma with a drug that meets FDA standards for approval	useful for treating glaucoma or ocular hypertension
useful for treating glaucoma	useful for treating glaucoma with a drug that meets FDA standards for approval	useful for treating glaucoma
useful for treating ocular hypertension	useful for treating ocular hypertension with a drug that meets FDA standards for approval	useful for treating ocular hypertension

The Court construes all of the disputed phrases in a manner that does not read in the additional limitation of "with a drug that meets FDA standards for approval." For example, the Court construes "treating glaucoma or ocular hypertension" as "treating glaucoma or ocular hypertension."

A. Parties' Construction Arguments

The parties dispute whether the construction should include the additional limitation of "with a drug that meets FDA standards for approval." Allergan's argument is premised on the idea that, in the United States, a patient cannot be legally treated with a drug that is not approved

by the FDA. Allergan cites to 21 U.S.C. § 355(a), to support its statement that FDA approval must be obtained before a drug may be administered to a person for treatment of a disease. This fact alone, however, provides no support for Allergan's proposed limitation because FDA approval is irrelevant to proceedings before the Patent and Trademark Office ("PTO"). *Scott v. Finney*, 34 F.3d 1058, 1063-1064 (Fed. Cir. 1994) ("Title 35 does not demand that such human testing occur within the confines of Patent and Trademark Office (PTO) proceedings."); *In re Anthony*, 414 F.2d 1383, 1395 (CCPA 1969) ("Congress has given the responsibility to the FDA, not to the [PTO], to determine . . . whether drugs are sufficiently safe . . . .")(citation omitted); *see generally C.R. Bard v. M3 Sys.*, 157 F.3d 1340, 1376 (Fed. Cir. 1998) ("FDA approval is not required before a sale can bar patent rights. Even an illegal sale of the claimed invention before the critical date can bar patent rights."). This equally applies to Allergan's argument relating to the labeling and packaging inserts provided with the commercial embodiment. The Court therefore finds that it would be improper to read this limitation into the claims just because the claimed invention must obtain FDA approval before it can be administered to a person.

Allergan cites to two cases for the proposition that courts have previously looked to the FDA standards in construing claim limitations that relate to treatment with pharmaceuticals. First, Allergan cites to *Key Pharmaceuticals v. Hercon Laboratories Corp.*, 161 F.3d 709 (Fed. Cir. 1998), as example of when a district court properly looked to the FDA standards to determine what amounts are considered "pharmaceutically effective amount." In *Key Pharmaceuticals*, the question before the Federal Circuit was whether it was proper to consult extrinsic evidence to determine what constitutes a "pharmaceutically effective amount." In that case, the court found that it was "quite sensible to look to the FDA to determine what amounts

are considered pharmaceutically effective" because neither party "pointed to intrinsic evidence establishing the numerical range of amounts represented by the term 'pharmaceutically effective amount.' … the resort to and use of extrinsic evidence in this case was entirely appropriate." *Id.* at 718. Thus, the court found that it was proper to rely on extrinsic evidence to determine what constitutes a "pharmaceutically effective amount."

Similarly, in *Schwarz Pharma, Inc. v. Paddock Laboratories*, Inc., 429 F. Supp. 2d 1116, 1126 (D. Minn. 2006) the District Court construed "a suitable amount . . . to inhibit cyclization and discoloration" to mean "a sufficient (i.e. effective) amount of an alkali or alkaline earth metal carbonate to reduce cyclization and oxidative discoloration to a point that the resulting drug product is stable in accordance with generally understood guidelines in existence in 1987 which would meet the requirements for FDA approval." Again, the court turned to the extrinsic evidence after it determined that it could not construe the phrase based on the intrinsic evidence. Both of these cases are distinguishable from the present case because the amount of the drug is not in dispute. Indeed, neither party argues that the Court should consult extrinsic evidence to construe these phrases. Given this, the Court turns to the intrinsic evidence to determine how one of ordinary skill in the art would interpret these phrases.

B. Findings

To begin its analysis, the Court first turns to the language of the claims, as it provides "substantial guidance as to the meaning of particular claim terms." *Phillips*, 415 F.3d at 1313 (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The phrase "treating glaucoma or ocular hypertension" appears in claim 1 of the '149 patent and claim 1 of the '976 patent. The phrase "treatment of glaucoma or ocular hypertension" appears in claim 4

of the ’149 patent. The phrase “useful for treating glaucoma or ocular hypertension” appears in claim 4 of the ’463 patent and claim 7 of the ’258 patent. The phrase “useful for treating glaucoma” appears in claim 6 of the ’258 patent. The phrase “useful for treating ocular hypertension” appears in claim 5 of the ’258 patent. Three things are evident from the claim language. First, the phrases are used consistently in each patent and are meant to have a similar meaning. Second, the claim language does not explicitly define the term. Third, the phrase “with a drug that meets FDA standards for approval” or even the term “FDA” is not recited in the claims. The Court therefore turns to the specification as it “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Id.* at 1315 (citation omitted).

Like the claims, the specification does not provide an explicit definition of the disputed phrases. In fact, the only intrinsic evidence Allergan points to is the portion of the specifications that refers to the FDA-approved regimen of serially administering the prior art medication, brimonidine (Alphagan®) and timolol (Timoptic®). ‘149 patent, 2:47-54. This FDA-approved regimen, however, is the regimen that the claimed invention was attempting to improve upon. That is, the claimed invention relates to a composition and method that were not FDA approved at the time the patents-in-suit were filed. The Court appreciates that FDA approval may have been the primary objective of the clinical trials described in the patent specification, but this objective was by no means a precondition for obtaining patent. As discussed, requiring such a precondition would be contrary to law. Simply stated, FDA approval is not a requirement for patentable subject matter and is not a limitation supported by the intrinsic evidence.

Likewise, the Court has examined the prosecution history and finds that its "repeated references to FDA regulations" is equally unpersuasive for the same reasons. In summary, Allergan is asking the Court to rewrite the claims to include a limitation that is simply not supported by the intrinsic evidence or common sense. "If the meaning of a disputed claim term is clear from the intrinsic evidence ... that meaning, and no other, must prevail; it cannot be altered or superseded by ... other external sources simply because one of the parties wishes it were otherwise. Competitors are entitled to rely on the public record of the patent, and if the meaning of the patent is plain, the public record is conclusive." *Key Pharmaceuticals*, 161 F.3d. at 716-717. The Court therefore rejects Allergan's proposed constructions. Accordingly, the Court construes the phrase "treating glaucoma or ocular hypertension" as "treating glaucoma or ocular hypertension;" the phrase "treatment of glaucoma or ocular hypertension" as "treatment of glaucoma or ocular hypertension;" the phrase "useful for treating glaucoma or ocular hypertension" as "useful for treating glaucoma or ocular hypertension;" the phrase "useful for treating glaucoma" as "useful for treating glaucoma;" and the phrase "useful for treating ocular hypertension" as "useful for treating ocular hypertension."

2. ""%," "% . . . by weight," "concentration . . . % by weight," "% by weight," "% (w/v)""

Claim Phrase	Allergan's Proposed Construction	Sandoz/Hi-Tech/Alcon/Apotex Proposed Construction
"%," "%. . . by weight"; "concentration . . . % by weight," "% by weight," "% (w/v)"	Plain and ordinary meaning	Ratio of the weight of the ingredient in question divided by the total volume of the solution, such ratio expressed as a percentage.

The Court construes these phrases as "ratio of the weight of the ingredient in question

divided by the total volume of the solution, with this ratio expressed as a percentage."

A. Parties' Construction Arguments

The parties dispute whether the disputed terms and phrases require a construction. Allergan argues that the Defendants have improperly chosen a narrow definition of the percent by weight terms and that these terms should be given their plain and ordinary meaning. Allergan concedes that Defendants' construction may represent one plain meaning of the percent by weight terms. Allergan, however, fails to provide a conflicting plain and ordinary meaning. Indeed, there does not appear to be a plausible conflicting plain meaning as it relates to these percent by weight terms.

B. Findings

To begin its analysis, the Court first turns to the claims language. The terms "%," "% . . . by weight," "concentration . . . % by weight," "% by weight," "% (w/v)" (the "Percent-By-Weight Terms") are used throughout the claims of the patents-in-suit, and the parties agree that they should be construed together. *See* claims 1-4 of the '149 patent, claims 1-6 of the '463 patent, claim 1 of the '976 patent, and claims 1-3 and 7-9 of the '258 patent. Two things are evident from the claim language. First, the phrases are used consistently in each patent and are meant to have a similar meaning. Second, although the claim language does not explicitly define the phrases, it does indicate that they refer to a weight by volume ratio. Specifically, the claims of the '149 and '463 patent recite both the "% … by weight" and "%" notation to refer to weight by volume. The claims of the '976 patent recite only the "% by weight" notation to refer to weight by volume. The claims of the '258 patent recite "% … (w/v)," "% … by weight," and "%" notation to refer to weight by volume. Additionally, the Court notes that there is nothing

particularly confusing about the terms and phrases as they are used in the claims. With this in mind, the Court turns to the specification for additional insight.

The specifications of the patents-in-suit are also consistent with the weight by volume being expressed as a percentage. For example, each specification includes "Example 1" having "[t]he combination of active pharmaceutical ingredients is as follows: Brimonidine Tartrate 0.20% (w/v) and Timolol Maleate 0.68% (w/v) (Equivalent to 0.50% (w/v) timolol)." *See, e.g.*, '149 patent, 3:38-42. Here the specification is disclosing to one of ordinary skill in the art that the amount of the active pharmaceutical ingredients in a ratio of the weight of the ingredient in question divided by the total volume of the solution, with the ratio expressed as a percentage. Thus, given that the parties agree that the various terms refer to the same measurement, the Court concludes that a person of ordinary skill would understand that these percent by weight terms refer to the ratio of the weight of the ingredient in question divided by the total volume of the solution. For these reasons, the Court construes the Percent-By-Weight Terms as a "ratio of the weight of the ingredient in question divided by the total volume of the solution, with this ratio expressed as a percentage."

3. "as effective as" and "without loss of efficacy"

Claim Phrase	Allergan's Proposed Construction	Sandoz/Hi-Tech/Alcon/Apotex Proposed Construction
as effective as	when balancing safety and efficaciousness, is at least as equal to	equal or greater lowering of IOP
without loss of efficacy	with at least equal efficacy, when balancing considerations of safety and efficaciousness	without decrease in lowering of IOP

The Court construes "as effective as" as "equal or greater at lowering intraocular pressure (IOP)," and "without loss of efficacy" as "without decrease in lowering intraocular pressure

(IOP)."

A. Parties' Construction Arguments

The parties dispute whether the construction should include the additional limitation of balancing consideration of safety and efficaciousness as proposed by Allergan. It is undisputed that the current invention slows the progression of glaucoma by lowering the pressure of the fluid in the eye, known as intraocular pressure ("IOP"). This is because scientists and medical personnel believe that the elevated IOP found in glaucoma patients contributes to the gradual retinal deterioration and loss of vision that are characteristics of the disease. It has also been found that patients suffering from ocular hypertension have elevated IOP and, although these patients are not yet diagnosed with glaucoma, they must be observed closely for its onset. Thus, the lowering of the IOP is a primary measure of the claimed inventions overall efficacy. Allergan argues that elevated IOP is not the only measure of the overall efficacy of a glaucoma treatment, and a balancing test should be included in the construction. Defendants contend that Allergan is attempting to impermissibly import this balancing limitation into the claims. With this in mind, the Court turns to the intrinsic evidence to determine how one of ordinary skill in the art would interpret the claims.

B. Findings

To begin its analysis, the Court first turns to the claims themselves. The term "as effective as" appears in claim 1 of the '149 patent. The term "without loss of efficacy" appears in claim 4 of the '149 patent. Although the claim language does not define each phrase, it does indicate that the efficacy component was claimed separately from the safety component. For example, one of the primary safety benefits of the claimed invention is that it reduces the

patient's exposure to the amount of toxic preservative benzalkonium chloride. '149 patent, 1:16-21. Claim 2 of the '149 patent explicitly claims this safety benefit by reciting "wherein said composition further comprises from 0.001% to 0.01% benzalkonium chloride." Likewise, claim 3 further specifies this safety benefit by reciting "wherein said composition comprises about 0.005% benzalkonium chloride." Thus, the claim language supports Defendants' arguments that Allergan is attempting to improperly import a balancing limitation.

The specification further supports the argument that Allergan is attempting to import a balancing limitation. Specifically, the specification states two separate criteria for evaluation: efficacy and safety. As discussed, efficacy in the context of the patents-in-suit means lowering intraocular pressure. For example, the "Description of the Invention" states that "it has been found that adequate lowering of intraocular pressure has been obtained when administering the compositions of this invention..." '149 patent, 2:47-50. Similarly, Example II compares the efficacy of the combination product to monotherapies in the prior art. '149 patent, 4:5-17. Likewise, the key inclusion criteria for the study includes specific intraocular pressures that patients must exhibit in order to qualify for the clinical study. '149 patent, 4:39-44. These passages all explicitly state the connection between efficacy and lowering intraocular pressure.

Moreover, in describing the statistical methods of the clinical study, the patent states: "Analyses were performed for the primary efficacy variable IOP … ." '149 patent, 5:30-31. Likewise, in the summary of the clinical trial data, the specification is separated into three sections: Efficacy, Safety, and Pharmacokinetics. '149 patent, 5:55 - 8:65. Under the 'Efficacy' section, the specification discusses only one type of measurable (non-survey) data, which is the mean decrease from baseline diurnal IOP as being statistically significantly greater for the

Combination than with Timolol (alone) or with Brimonidine (alone). '149 patent, 6:1-23. The conclusion section of the clinical study also contains two separate sentences—one that addresses efficacy and the other that addresses safety. '149 patent, 8:66-9:8. The first sentence states: "The Combination treatment (brimonidine tartrate 0.2%/ timolol 0.5%) administered BID for 3 months was superior to Timolol (timolol 0.5% BID) and Brimonidine (brimonidine tartrate 0.2%) TID in lowering the elevated IOP of patients with glaucoma or ocular hypertension." '149 patent, 8:66-9:3. Collectively, these statements show that in the context of the patents-in-suit, "effective" is a term that is directed to the effective treatment of glaucoma, which is achieved by lowering intraocular pressure.

In contrast, the '149 patent specification is inconsistent with Allergan's proposed construction as it repeatedly considers efficacy and safety as separate criteria. *See* '149 patent, 7:1–8:64. For instance, the specification states:

> There is, moreover, a long felt need for an *effective and safe* topical ophthalmic pharmaceutical composition including brimonidine and timolol which has increased stability and requires a lower effective concentration of preservative as compared to the individual agents taken alone.

'149 patent, 1:16-21 (emphasis added). Another example appears in the explanation for the objective of the clinical study presented in Example II—the only data presented related to either efficacy or safety:

> To compare the *safety and efficacy* of twice-daily dosed brimonidine tartrate 0.2%/timolol 0.5% ophthalmic solution combination (henceforth referred to as Combination) with that of twice-daily dosed timolol ophthalmic solution 0.5% (henceforth referred to as Timolol) and three-times-daily dosed ALPHAGAN® (brimonidine tartrate ophthalmic solution) 0.2% (henceforth referred to as Brimonidine) administered for three months plus 9-month masked extension) in patients with glaucoma or ocular

hypertension.

'149 patent, 4:8-17 (emphasis added). The "Criteria for Evaluation" presents separate headings for "Efficacy" and "Safety." '149 patent, 5:11-20. Similarly, the "Summary" section of the clinical study also separates the discussions of efficacy and safety by headings appropriate to each, followed by the data that is relevant to each separate consideration; efficacy focusing on IOP lowering and safety focusing on adverse events. For these reasons, the Court finds that the patentee considered efficacy and safety to be separate considerations, which is consistent with their plain and ordinary meaning. Thus, the '149 patent specification supports Defendants' proposed construction and contradicts Allergan's proposed construction.

In addition, the fact that patient comfort and treatment satisfaction is listed in the '149 patent specification under the efficacy criteria of evaluation further contradicts Allergan's proposed construction. If the patentee considered patient comfort and treatment satisfaction as "safety-related considerations," the patentee could have listed these considerations under the safety criteria of evaluation, not efficacy. Thus, Allergan's argument that patient comfort and treatment satisfaction are "safety-related considerations" for evaluating efficacy is contradicted by the specification. Therefore, based on the intrinsic evidence, the Court rejects Allergan's attempt to import a limitation into the claim. The Court also finds that Allergan's proposed additional language would be confusing and ambiguous. Accordingly, the Court construes the phrase "as effective as" to mean "equal or greater at lowering intraocular pressure (IOP)," and the phrase "without loss of efficacy" to mean "without decrease in lowering intraocular pressure (IOP)."

4. "therapeutically effective amount"

Claim Phrase	Allergan's Proposed Construction	Sandoz/Hi-Tech/Alcon Proposed Construction	Apotex's Proposed Construction
therapeutically effective amount	When balancing considerations of safety and efficaciousness, the administration of the recited composition is considered effective to treating glaucoma or ocular hypertension	Amount of composition necessary to lower IOP an equal or greater amount than concomitant administration (either timolol then brimonidine or brimonidine then timolol)	Amount of composition necessary to lower IOP when single composition is administered as claimed

The Court construes "therapeutically effective amount" as the "amount of composition necessary to lower intraocular pressure (IOP) when administered as claimed"

A. Parties' Construction Arguments

Similar to the previous disputed terms, the parties dispute whether the construction should include the additional limitation of "balancing considerations of safety and efficaciousness" as proposed by Allergan. As before, Allergan's proposed construction attempts to improperly import a limitation into the claim. In addition, Defendants Sandoz, Hi-Tech, and Alcon propose a construction that is slightly different than the construction proposed by Defendant Apotex. Specifically, their construction includes the additional limitation that the composition must lower IOP "an equal or greater amount than concomitant administration (either timolol then brimonidine or brimonidine then timolol)."

B. Findings

To begin its analysis, the Court turns to the intrinsic evidence. The term "therapeutically

effective amount" appears in claim 1 of the '976 patent. Two things are evident from the claim language. First, the claim language does not explicitly define the term. Second, the phrase "balancing considerations of safety and efficaciousness" fails to appear anywhere within the plain language of the claims. Thus, the Court turns to the specification for added insight.

First, the Court notes that all of the patents-in-suit have a nearly identical specification. Thus, the Court's analysis for the claim phrases "as effective as" and "without loss of efficacy" directly applies to this phrase because Allergan proposes a similar construction that includes "balancing safety and efficaciousness" like it did for these phrases. As determined by the Court for these phrases, the intrinsic record indicates Allergan's proposed construction is an attempt to improperly import a limitation into the claim. In addition to the intrinsic evidence discussed above, the specification of the '976 patent provides further support for Apotex's proposed construction of the term "therapeutically effective amount." The specification of the '976 patent states:

> The present invention further comprises an article of manufacture comprising packaging material and a pharmaceutical agent contained within said packaging material, wherein the pharmaceutical agent is *therapeutically effective for lowering intraocular pressure* and wherein the packaging material comprises a label which indicates the pharmaceutical agent can be used for lowering intraocular pressure and wherein said pharmaceutical agent comprises an effective amount of brimonidine and an effective amount of timolol.

'976 patent, 3:54-63. Thus, the '976 patent explicitly states that for the pharmaceutical agent to be "therapeutically effective" it must lower intraocular pressure. This is consistent with the intrinsic evidence discussed above and further confirms that Allergan's proposed construction improperly imports a balancing limitation. Therefore, the Court construes "therapeutically

effective amount" to mean "amount of composition necessary to lower intraocular pressure (IOP) when administered as claimed."

5. "administered in separate compositions"

Claim Phrase	Allergan's Proposed Construction	Sandoz/Hi-Tech/Alcon Proposed Construction
administered in separate compositions	Administered separately as brimonidine treatment or timolol treatment	Timolol then brimonidine or brimonidine then timolol, concomitantly administered to the eye

The Court construes "administered in separate compositions" as "serially administered to the eye in separate compositions as brimonidine three times a day and timolol twice a day."

A. Parties' Construction Arguments

The parties dispute whether "administered in separate compositions" refers to separately administering either brimonidine *or* timolol as a monotherapy, or instead refers to administering both brimonidine and timolol as a serial therapy. Allergan argues that the phrase refers to monotherapy. Defendants Sandoz, Hi-Tech, and Alcon contend that the phrase refers to serial therapy. Apotex does not take a position either way.[1]

B. Findings

To begin its analysis, the Court turns to the claims themselves. The phrase "administered in separate compositions" appears in claim 1 of the '149 patent. A reading of this phrase in the context of the entire claim indicates that the patentee was comparing the effectiveness of the

[1] During the claim construction hearing, Apotex's counsel stated "Apotex will not be taking a position on [the phrase "administered in separate compositions"]. We're not advocating either way." Transcript of Claim Construction Hearing at 4:12-17.

claimed single composition to the serial treatment of brimonidine and timolol administered as two separate compositions. Specifically, claim 1 of the '149 patent recites:

> A method of treating glaucoma or ocular hypertension by topical administration of about 0.2% brimonidine by weight to *an eye* of a person in need thereof, said improvement comprising topically administering to *said eye*, in a single composition, about 0.2% brimonidine by weight and 0.5% timolol by weight twice a day; as the sole active agents; wherein said method is as effective as administration of 0.5% *timolol* twice a day *and* 0.2% *brimonidine* three times a day to *said eye*, *wherein* the two compounds are *administered in separate compositions*.

Despite the unambiguous claim language, Allergan argues that the effectiveness of the single compound should be determined by comparing it with either timolol *or* brimonidine administered as a monotherapy. However, Allergan's proposal ignores the fact that the patentee chose to use the word "and" rather than "or" between timolol and brimonidine in the claim. If the patentee intended Allergan's proposed construction, it should have drafted the phrase to read "wherein said method is as effective as administration of 0.5% timolol twice a day *or* 0.2% brimonidine three times a day to said eye." This is further confirmed by Allergan's assertion that the claimed invention is an improvement over the prior art serial treatment. *See* Dkt. No. 117 at 2 (arguing that Combigan "provides patients with comparably efficacy and lower side effects all while *eliminating three doses* of medication a day") (emphasis added). Moreover, the antecedent basis for "said eye" in the claim, confirms that the eye receives both compounds via the single composition described in the claim. That is, the claim language does not provide for "said eye" to receive one of the compounds without receiving the other.

The specification of the '149 patent further supports the conclusion that the patentee was comparing the effectiveness of the claimed single composition to the serial administration of

brimonidine and timolol. Although, the term "administered in separate compositions" is not expressly defined in the specification of the '149 patent, the specification does discuss serial therapy in the context of patient compliance when it states:

> Such combinations or formulations are available for separate use in the ophthalmic art and have been combined in serial application during the course of treatment of glaucoma. However, there are concerns and expressed reservations in the ophthalmic community about patient compliance when the patient is required to administer separate medications to treat a single disease or condition such as glaucoma.

'149 patent, 1:9-12. This section explicitly demonstrates that the patentee intended to overcome problems associated with the serial application of both brimonidine and timolol. This is further demonstrated in the '149 patent specification when it states that "[i]n FDA-approved adjunctive therapy, wherein Alphagan® and Timoptic® are serially administered, the patient is exposed to almost three times the concentration of benzalkonium chloride as compared to the administration of the compositions of this invention twice a day." '149 patent, 2:58-62. Thus, like the claim language, the specification supports the conclusion that the patentee was comparing the effectiveness of the claimed single composition to the serial therapy of both brimonidine and timolol.

Allergan argues that adopting a construction that includes serial therapy would exclude the monotherapy described in the clinical study. '149 patent, 4:22-24. The Court finds, however, that the monotherapy described in the specification is not an embodiment of the claimed invention, but instead is the prior art. Indeed, the claimed invention is a single composition of brimonidine and timolol, not a monotherapy administration of either brimonidine

or timolol in separate compositions. Simply stated, the single composition used in the study is the preferred embodiment, and the Court's construction does not exclude that embodiment.

Finally, the prosecution history also supports the conclusion that the patentee was comparing the effectiveness of the claimed single composition to the serial treatment of brimonidine and timolol. Specifically, the patentee stated, "the fact that the composition containing both drugs is as effective as the serial treatment is surprising and unexpected." '149 prosecution history, Dkt. No. 126-1 at 16. Thus, the "surprising and unexpected" results are based on comparing the single composition to a serial treatment of these two drugs, and not a monotherapy of either brimonidine or timolol. In sum, based on the intrinsic record, the Court construes "administered in separate compositions" to mean "serially administered to the eye in separate compositions as brimonidine three times a day and timolol twice a day."

6. "reducing the number of daily topical ophthalmic doses"

Claim Phrase	Allergan's Proposed Construction	Sandoz/Hi-Tech/Alcon Proposed Construction	Apotex's Proposed Construction
reducing the number of daily topical ophthalmic doses	Plain and ordinary meaning	reducing the number of daily ophthalmic does from 3 to 2 times a day	Plain and ordinary meaning

After reviewing the disputed phrase in the context of the entre claim, the Court is of the opinion that there is nothing confusing about this phrase. The Court therefore finds that no construction is necessary.

A. Parties' Construction Arguments

The parties dispute whether the Court needs to construe the phrase "reducing the number of daily topical ophthalmic doses." Defendants Sandoz, Hi-Tech, and Alcon propose a construction that includes "reducing the number of daily ophthalmic does from 3 to 2 times a day." Allergan and Defendant Apotex contend that the phrase should be given its plain and ordinary meaning.

B. Findings

To begin its analysis, the Court turns to the claims themselves. The term "reducing the number of daily topical ophthalmic doses" appears in claim 4 of the '149 patent. The Court agrees with Allergan and Apotex that the proposed construction would result in repetitive and confusing claim language. Specifically, Defendants' proposed phrase is already specified in the claim language when it recites "[a] method of *reducing the number of daily topical ophthalmic doses* of brimondine administered topically to an eye of a person in need thereof for the treatment of glaucoma or ocular hypertension *from 3 to 2 times a day* without loss of efficacy." Therefore, the Court concludes that in the context of the entire claim, this phrase should not be confusing to a jury and does not require construction. The Court therefore adopts the Allergan's and Apotex's suggestion that no construction is necessary.

VI. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted

by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 27th day of April, 2011.

T. JOHN WARD
UNITED STATES DISTRICT JUDGE